

A NEW SPECIES OF *FORCELLINIA* (ACARINA, TYROGLYPHIDAE)
FROM BEE HIVES IN WESTERN AUSTRALIA

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[Read 12 April 1962]

SUMMARY

A new species *Forcellinia galleriella* sp. nov. from bee hives in Western Australia is described. The hives were heavily infested with larvae and pupae of the wax moth, *Galleriella melonella*, upon which the mites were apparently feeding.

Family TYROGLYPHIDAE LATREILLE 1796.

Subfamily TYROGLYPHINAE Ouds. 1932.

Genus *FORCELLINIA* Ouds. 1924.

Oudemans, A. C., 1924 Analytical Key for the Classification of Families and Genera of Diacotricha Ouds., 1906 (Acari) — Ent. Ber. VI, No. 135, pp. 226-235.

Type *Tyroglyphus wasmanni* Moniez, 1892.

Only three species of this genus are known. The genotype, *F. wasmanni* (Moniez), is known from both male and female as well as the deutonymph. It has been abundantly recorded, Michael (1), Zachvatkin (4), and E. and F. Türk (3), from the nests of many species of ants in Europe. *F. fuliginosa* E. and F. Türk, 1956, is only known from the male and deutonymph from the nest of an ant, *Lasius fuliginosus*. A third species, *F. rufae* n. sp., was described by E. and F. Türk, 1956, from the nests of *Formica rufa* from the deutonymph only.

The new species here described occurred in numbers in a bee hive strongly infested with the wax moth, *Galleriella melonella*, at Perth, Western Australia, forwarded by Mr. G. D. Rimes.

Only the adults were found, no deutonymphs being observed.

Forcellinia galleriella sp. nov.

Description: Female holotype.—Fig. A-D. Length of idiosoma 440¹, width 290. Shape, oval. Colour, a dirty white.

Dorsum: With a quadrate propodosomal shield. With 12 pairs of long setae excluding the pseudostigmal (ps), all strongly and shortly ciliated; setae d1, d2, d3, and li slightly clavate, the rest blunt and tapering; vi 57, ve 48, ps 24, sci 62, sce 72, dI 48, d2 58, d3 72, d4 72, p 192, li 67, l2 53, l3 144, h 106. Palpi two segmented. Chelicerae as figured, with two or three teeth on each digit.

Venter: Genital opening between coxae III and IV. Epimera of leg I joined medially to form a short sternum, epimera of other legs free; only coxae I and III with a short fine seta. Anal opening 86 long as figured.

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¹ All measurements in micra (μ).

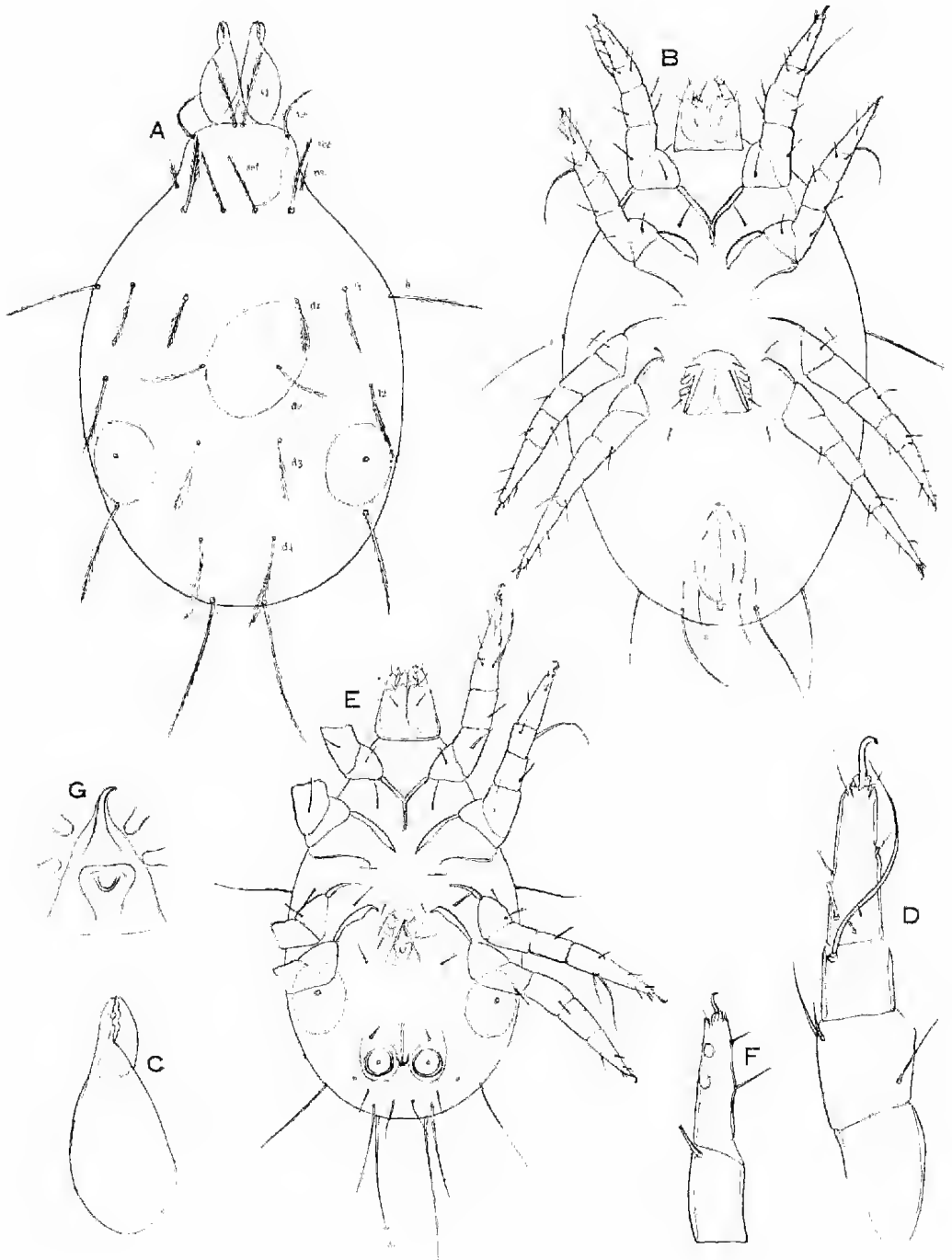


Fig. 1. *Forcellinia galleriella* sp. nov. A-D female: A, dorsal view; B, ventral view; C, mandible; D, leg I dorsal; E-G male: E, ventral view; F, tibia and tarsus of leg IV; G, genitalia showing penis.

Legs: Short and fairly stout, length (excluding coxae), I 216, II 211, III 216, IV 240; tarsi I 58, tibia 29, genu 48, tibia with a long subapical seta reaching to tip of claw; tarsi with short caruncle and long claw, and the sensory setae as figured.

Male allotype: Fig. E-G.—Idiosoma 365 long, width 235. Dorsal setae, vi 48, ve 34, ps 24, sci 48, sce 72, d1 24, d2 43, d3 48, d4 58, p 163, li 53, l2 48, l3 77, h. 72. Epimera as in female. Genital opening between coxae IV. Anal suckers as figured. Tarsal discs on leg IV in the distal half 14 apart, tarsus 48 long.

Legs: I 206, II 197, III 206, IV 211 long.

Remarks: *F. galleriella* sp. nov. differs from the other two known adult species in the dimensions of the dorsal setae and can readily be separated by the following key.

Key to the Known Adults of the Genus *Forcellinia*.

1. All dorsal setae, including the posterior pair and the humerals, short and of subequal length *F. fuliginosa* E. and F. Türk.
Dorsal setae mainly longer and of varying lengths 2
2. Internal vertical setae (vi) much finer and shorter than the propodosomal setae (sci and sce); d1 much shorter than d2-d4, but equally strong; d2-d4 as long as p. *F. wasmanni* (Moniez)
vi subequal in length and structure to sci or sce; d1-d4 less than half length of p. *F. galleriella* sp. n.

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